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10/602,987	06/25/2003	Anthony J. Wasilewski	A-8919	6302	
542. 7590. 04/15/2008 SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT			EXAM	EXAMINER	
			CHAI, LONGBIT		
5030 SUGARLOAF PARKWAY LAWRENCEVILLE, GA 30044		ART UNIT	PAPER NUMBER		
		2131			
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# Please find below and/or attached an Office communication concerning this application or proceeding.

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## Application No. Applicant(s) 10/602,987 WASILEWSKI ET AL. Office Action Summary Examiner Art Unit LONGBIT CHAI 2131 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 24 March 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-19 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 25 June 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Imformation Disclosure Statement(s) (PTC/S5/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Application/Control Number: 10/602,987 Page 2

Art Unit: 2131

#### DETAILED ACTION

Presently, pending claims are 1 – 19.

#### Priority

This application was originally filed on 25 June 2003; however, in view of Provisional
application 60/054,575 (or 60/054,578) both filed on 1<sup>st</sup> August 1997 and Affidavits submitted on
1<sup>st</sup> June 2007, the expected earliest beneficial filing date by Applicants for that particular
amended claim limitation is 1 August 1997.

Examiner notes in this final Office action, the prior-art rejection is based upon the assumption of beneficial earlier filling date as Applicant argues – i.e. 1st August 1997 from its Provisional application 60/054,575 (or 60/054,578) and its Affidavits filed on 1st June 2007 as Applicant asserts that the statements in the previously submitted Rule 1.132 Affidavit, made by a person of skill in the art (regarding the claim limitation "using packet ID (PID) for the selection of encryption"), are in fact evidence that Provisional Application 60/054,575 (or 60/054,578) provides written description support for the claims.

#### Information Disclosure Statement

- The submission of information disclosure statement (IDS) on 24 March 2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
- 4. The information disclosure statement filed on 25 June 2003 still fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the inventor (applicant) name, application number, and some of the attorney docket numbers as indicated on the IDS are

Art Unit: 2131

incorrect (e.g., serial number was "UNKNOWN" on page 4 and serial number was 09/930,901 instead of 10/602,987 on page 9 – 15).

It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

### Response to Arguments

- 5. Regarding the previously presented double patenting, Applicant asserts a determination of obviousness is still premature, since neither application has allowable claims. Since this is a provisional rejection, Applicant chooses not to file a terminal disclaimer at this time. Applicant may file a terminal disclaimer when the instant application has allowable subject matter.
  Accordingly, the double patenting rejection continues to hold in this final Office action please refer to the section of double patenting rejection.
- 6. As per claim 1 and 13, Applicant asserts (a) Kaufman does not teach the key identifier is used to select which packets are encrypted (Remarks; Page 3 / 3<sup>rd</sup> Para / Line 7 8) and accordingly (b) Wasilewski in view of Kaufman does not teach using a packet identifier to select for encryption a portion of each of a plurality of digital bit stream from a transport stream (Remarks: Page 3 / 2<sup>rd</sup> Para / Line 5 6).
- Examiner notes, according to MPEP § 2145, in response to applicant's arguments
  against the references individually (i.e. see above (a) Kaufman does not teach the key identifier

Art Unit: 2131

is used to select which packets are encrypted), Examiner notes one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

On this regard, Examiner asserts Wasilewski'782 teaches (a) the packets of a data stream can be partially encrypted based on the <u>service type</u> of the packet such as video, audio or data (V/A/D) service type – i.e., to select for encryption a portion of each of a plurality of digital bit stream from a transport stream (i.e. partially encrypted from a video, audio or data (V/A/D) combined data stream) (Wasilewski : Column 4 Line 58 – 67) and (b) the packet ID (PID) is available to identify a packet as one of video, audio or data (V/A/D) service types (Wasilewski : Column 14 Line 4 – 7 and Column 13 Line 57 – 59: each type of audio, video and data elementary streams is uniquely assigned a packet ID (PID)).

However, Wasilewski'782 does not disclose explicitly using the packet ID to select which packets to be encrypted.

Examiner notes it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Kaufman within the system of Wasilewski because Kaufman teaches using a packet ID for encryption can provide the advantage for simplifying the decryption task at the receiver by using packet ID as an indicator of the encryption / decryption key (Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: the key identifier placed inside a transported packet can be considered as one type of packet identifier).

In summary, considering each individual teaching from Wasilewski'782 and Kaufman such as (A) Wasilewski'782 teaches (i) the packets of a data stream can be partially encrypted based on the <u>service type</u> of the packet such as video, audio or data (V/A/D) service type

Art Unit: 2131

(Wasilewski: Column 4 Line 58 – 67) and (ii) the packet ID (PID) is available to identify a packet as one of video, audio or data (V/A/D) service types (Wasilewski: Column 14 Line 4 – 7 and Column 13 Line 57 – 59) and (B) Kaufman teaches using a packet ID for encryption can provide the advantage for simplifying the decryption task at the receiver by using packet ID as an indicator of the encryption / decryption key (Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: the key identifier placed inside a transported packet can be considered as one type of packet identifier). Therefore, Examiner notes the combination of Wasilewski'782 and Kaufman as a whole does teach "using a packet identifier to select for encryption a portion of each of a plurality of digital bit stream from a transport stream" and as such Applicant's arguments (see above (b)) are respectfully traversed.

Examiner further notes this motivation of combination based on the knowledge of a person of skill in the art is also consistent with the position taken by Applicant in the use of an Affidavit, made by a person of skill in the art, regarding the claim limitation "using packet ID (PID) for the selection of encryption" to provide written description support for the claims – even though the instant disclosure of Provisional application does not exactly and directly teach the claim limitation and instead merely support the teaching in the following ways: (a) the packets of a data stream can be partially encrypted based on the service type of the packet such as video, audio or data (V/A/D) service type and (b) the packet ID (PID) is available to identify a packet as one of video, audio or data (V/A/D) service types (please refer: Provisional 60/054,578: Page 28 Line 25-28 & SPEC: Page 27 Line 19 – 29).

## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

Art Unit: 2131

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1 and 13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 13 of copending Application No. 10/602,986. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 13 of the instant application are envisioned by the claims of copending application that contain all the limitations of claims of the instant application because the claim limitation of "the partially-encrypted bit stream" as recited in the instant application is equivalent to that of "the combined bit stream" as presented in the co-pending application and as such are unpatentable for obvious-type double patenting.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 2131

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless -

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 Wasilewski (U.S. Patent 5,418,782), which is derived from its patent publication 102(b) date on
 33 May 1995, and in view of Kaufman (U.S. Patent 5,081,678).

As per claim 1 and 13, Wasilewski teaches a method for providing a plurality of programs in a conditional access system (Wasilewski: Figure 1 and Column 1 Line 44 – 52), the method comprising the steps of:

using a packet identifier (See Kaufman below) to select for encryption a portion of each of a plurality of digital bit streams from a transport stream (Wasilewski: Figure 1 and Column 4 Line 65 – Column 5 Line 7 and Column 13 Line 65 – Column 14 Line 5: (a) one or more bit streams of audio, video and data streams can be selected for encryption (Wasilewski: Figure 1 and Column 4 Line 65 – Column 5 Line 7: i.e. partial encryption per audio, video and data streams is streams from a transport stream) and besides, (b) each type of audio, video and data streams is uniquely assigned a packet ID (PID) (Wasilewski: Column 13 Line 65 – Column 14 Line 5);

encrypting the selected portion of each of the plurality of digital bit streams (Wasilewski: Column 4 Line 65 – 67: one or more service components of a given basic service can be encrypted prior to transmission – i.e. partially encrypted):

Art Unit: 2131

combining the encrypted portion and the unencrypted portion with the transport stream  $\label{eq:wasilewski} \begin{tabular}{ll} Wasilewski: Column 5 Line 1 - 7 and Column 4 Line 65 - 67: multiplexing is equivalent to combining); and \end{tabular}$ 

transmitting the combined stream (Wasilewski: Column 6 Line 17 - 20).

However, Wasilewski does not explicitly disclose to select for encryption a portion of each of a plurality of digital bit streams from a transport stream using a packet identifier.

Kaufman in view of Wasilewski teaches using a packet identifier to select for encryption a portion of each of a plurality of digital bit streams from a transport stream (Wasilewski: Column 4 Line 58 - 67, Column 14 Line 4 - 7 and Column 13 Line 57 - 59) & Kaufman: Column 2 Line 2 - 10 / Line 44 - 56: Examiner notes, first of all, Wasilewski teaches (a) one or more service components (i.e. any service component) of a given basic service may be encrypted prior to transmission (Wasilewski: Column 4 Line 58 - 67) and (b) each service component (i.e. elementary stream) is packetized and inserted into the payload section of a transport stream and each packetized elementary stream is assigned can be identified by a unique packet identifier (PID) (Wasilewski: Column 14 Line 4 - 7 and Column 13 Line 57 - 59). Accordingly, Wasilewski teaches a transport stream constitutes a portion of encryption packets and a portion of non-encryption packets. Examiner notes, secondly, regarding encryption packets. Kaufman (2<sup>nd</sup> Reference) teaches a particular key identifier from a plurality of keys can be placed inside a packet simply for encryption / decryption security purpose (Kaufman: Column 2 Line 2 - 10 / Line 44 - 56: (a) the key identifier placed inside a transported packet can be considered as one type of packet identifier and (b) Kaufman teaches using a packet ID for encryption can provide the advantage for simplifying the decryption task at the receiver by using packet ID as an indicator of the encryption / decryption key).

Art Unit: 2131

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Kaufman within the system of Wasilewski because (A) Wasilewski'782 teaches (i) the packets of a data stream can be partially encrypted based on the service type of the packet such as video, audio or data (V/A/D) service type (Wasilewski: Column 4 Line 58 – 67) and (ii) the packet ID (PID) is available to identify a packet as one of video, audio or data (V/A/D) service types (Wasilewski: Column 14 Line 4 – 7 and Column 13 Line 57 – 59) and (B) Kaufman teaches using a packet ID for encryption can provide the advantage for simplifying the decryption task at the receiver by using packet ID as an indicator of the encryption / decryption key (Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: the key identifier placed inside a transported packet can be considered as one type of packet identifier).

As per claim 2 and 14, Wasilewski teaches each of the plurality of digital bit streams includes a packet identifier, and wherein using a packet identifier to select for encryption a portion of each of the plurality of digital bit streams by identifying a predetermined packet identifier (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67 & Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: see the same reason for rejection set forth above).

As per claim 3 and 15, Wasilewski teaches each of the plurality of digital bit streams includes a packet identifier, and wherein using a packet identifier to select for encryption selects the plurality of digital bit streams by identifying a plurality of predetermined packet identifiers (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67 & Kaufman:

Art Unit: 2131

Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: see the same reason for rejection set forth above).

As per claim 4, Wasilewski teaches the selected plurality of digital bit streams are programs (Wasilewski: Column 13 Line 57 – 67 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular <u>program / basic service</u> (Video, Audio, Data) and any one or more service components of a given program / basic service can be encrypted prior to transmission (i.e. partially encrypted)).

As per claim 5, Wasilewski teaches the selected plurality of digital bit streams are elementary digital bit streams (Wasilewski: Column 13 Line 57 – 67 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular elementary digital bit stream / basic service (Video, Audio, Data) and any one or more service components of a given elementary digital bit stream / basic service can be encrypted prior to transmission (i.e. partially encrypted)).

As per claim 6, Wasilewski teaches a portion of the selected plurality of digital bit streams is encrypted according to the packet identifier associated with each of the plurality of digital bit streams (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67 & Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be included and selected according to its packet ID and also see the same reason for rejection set forth above).

Art Unit: 2131

As per claim 7, Wasilewski teaches the packet identifier is indicative of each of the plurality of digital bit streams being one of a video stream, an audio stream, and a data stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5).

As per claim 8 and 16, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with the video stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be included and selected and accordingly <u>video</u> stream can be included and selected).

As per claim 9 and 17, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with the audio stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be included and selected and accordingly audio stream can be included and selected).

As per claim 10 and 18, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with the data stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any

Art Unit: 2131

one of the video stream, the audio stream, and the data stream can be included and selected and accordingly data stream can be included and selected).

As per claim 11 and 19, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with at least one of the video stream, the audio stream, and the data stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the <u>video</u> stream, the <u>audio</u> stream, and the <u>data</u> stream can be included and selected).

As per claim 12, Wasilewski teaches the portion of the plurality of digital bit streams is encrypted according to a first level encryption method (Wasilewski: Column 4 Line 65-67 & Kaufman: Column 2 Line 12-17 / Line 2-10 / Line 44-56: using a packet identifier to select for encryption selects the plurality of digital bit streams by identifying a plurality of predetermined packet identifiers for the portion of encryption packets and also see the same reason for rejection set forth above).

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2131

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LONGBIT CHAI whose telephone number is (571)272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Longbit Chai/ Primary Examiner, Art Unit 2131 3/31/2008